REMARKS

Entry and consideration of this Amendment is respectfully requested.

Added Claims:

Newly added claim 21 claims the present invention similarly to that set forth in allowable claim 8. As indicated in claim 21, the estimation step performs an estimation on performance with the power control algorithm activated, and then an estimation of performance with the power control algorithm deactivated to determine whether or not it would be desirable (depending what is required) to activate, or de-activate, the power control algorithm. This feature is neither taught or suggested in the Vembu or Chen references.

As stated previously, in the Vembu system the signal-to-noise ratio (SNR) is detected and used to determine which control mode is to be triggered, either a burst or tracking mode. When the SNR is at the proper level, nothing is done, when the SNR is high the signal is adjusted down, and when the SNR is low the control algorithm determines if a quick burst of signal is needed (burst mode) or a gradual increase is needed (tracking mode). However, in Vembu, unlike the present invention, the control algorithm is operating at all times. This is very similar to the prior art already discussed in the present application, where the control algorithm is constantly on and constantly adjusting the signal. As stated in the present application, this is not desirable as sometimes it is more efficient to not adjust the signal as triggered by the control algorithm. At no point does Vembu teach estimating the optimal power control algorithm activity, as claimed in the present invention. Further, this deficiency in Vembu is not cured by the teachings of Chen.

With regard to claim 22, Vembu does not disclose or suggest "performing a different algorithm than said power control algorithm" when de-activating the power control algorithm. *See* claim 22. Vembu only discloses performing a different mode of the same algorithm. In Vembu, the different modes, called "burst mode" and "tracking mode", are different modes of a single algorithm, which is a closed-loop power control algorithm. These two modes of the same algorithm correspond to different parameters of this same algorithm, these different parameters correspond to different values of the power increase (the power increase being greater in burst mode than in tracking mode as disclosed at col. 2, lines 26-28, for example).

Further, Chen fails to teach or suggest this aspect of the present invention. Chen only discloses performing a different mode of a same algorithm. In Chen, the different modes, called "first mode" and "second mode", are different modes of the same algorithm, which is a closed-loop power control algorithm; these two modes of the same algorithm correspond to different parameters of this same algorithm, these different parameters corresponding to different feedback bandwidths and different power control delays (as disclosed, for example, at col. 2, lines 49-62).

Applicant further notes that a particular case of different power control algorithms, which has been considered in the present application, is the case of open-loop power control algorithms and closed-loop power control algorithms (corresponding to initial claim 4). The Examiner states that Vembu's "algorithms are chosen in a group comprising closed-loop power control algorithms and open-loop power control algorithms (both are closed-loop algorithms.)" *See* July 16, 2001 Office Action, page 3. Applicant respectfully disagrees with this statement. The

difference between closed-loop power control algorithms and open-loop power control algorithms is set forth at page 1 of our the above referenced application, which states:

> "As is known, CDMA systems use two types of power control techniques, a so-called open-loop power control technique, and a so-called closed loop power control technique (also called hereinafter CLPC). These power control techniques may be recalled for example for the uplink transmission direction, i.e. from MS ("Mobile Station") to BTS ("Base Transceiver Station"). In the open-loop power control, a MS transmit power is controlled based on the power received by this MS from a BTS. In the CLPC, a MS transmit power is controlled based on the transmission quality of the link between this MS and a BTS, as estimated at this BTS.
>
> The transmission quality of a link between a MS and a BTS depends on the ratio of the received signal power and the interference power, also called SIR (Signal-to-Interference Ratio). When the SIR of a MS is low, or equivalently when the powers of the other MSs are much higher than its power, its performances dramatically decrease. The CLPC algorithm enables to keep the SIR of each user as constant as possible.
>
> The principle of the CLPC algorithm is that the BTS periodically estimates the SIR of the received signal from each MS, and compares this estimated SIR to a target SIR (SIR_{target}). If the estimated SIR is lower than the target SIR, the BTS sends a command to the MS for the MS to increase its transmit power. Otherwise, the BTS sends a command to the MS for the MS to decrease its transmit power. The target SIR is chosen by the BTS as a function of the required quality of service."
> (*See* Specification, page 1)

Therefore, open-loop power control algorithms and closed-loop power control algorithms are different, *i.e.* open-loop power control algorithms are not at all closed-loop power control algorithms, contrary to the Examiner's assertions. Additionally, Vembu's algorithms are closed-loop power control algorithms: *see* in particular col. 2 lines 1-14 (in particular col. 2 line 1-4: "the wireless communication device, that is, a cellular phone, is controlled remotely") and everywhere thereafter where the SNR is the one as defined at col. 2 line 9 or 12 for such a closed-loop power control algorithm. Also, the algorithm's disclosed in Chen are also closed-

loop power control algorithms: *see* in particular col. 1, line 9 or col. 2, line 50.

It is for at least reasons set forth above that claim 22 is also allowable.

Finally, with regard to claim 23, neither the Vembu nor Chen references teach or suggest (either in combination or individually) "regularly estimating whether a criterion will or will not be met by the operation of [a] power control algorithm, and de-activating [the] power control algorithm in accordance with a result of [the] estimating step." *See* claim 23. As stated previously, Vembu fails to teach or suggest any estimation of whether or not a criterion will be met by the operation of the power control algorithm, and then deactivating the algorithm based on that estimation. *See supra.*

Applicant further notes that the above referenced discussion and arguments are equally applicable to the current pending claims 1-20, of the above application, and it is for at least these reasons, and the reasons set forth in Applicant's previous responses that these claims are also allowable.

Conclusion:

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

Applicant hereby petitions for any extension of time which may be required to maintain the pendency of this case, and any required fee, except for the Issue Fee, for such extension is to be charged to Deposit Account No. 19-4880.

Respectfully submitted,

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APPENDIX

VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE CLAIMS:

Claims 21-23 are added as new claims.